

## Indican

## Chemical Properties

CAS No. : 487-60-5

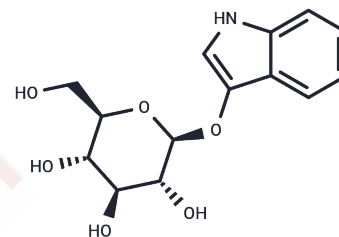
Formula: C<sub>14</sub>H<sub>17</sub>NO<sub>6</sub>

Molecular Weight: 295.29

Store at low temperature

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



## Biological Description

Description	Indican (Indoxyl- $\beta$ -D-glucoside) is a natural protective compound that is used to protect the liver.
Targets(IC50)	OAT,MRP,P-gp
In vitro	Oral single doses of Indican at 20, 40 mg/kg increase the systemic exposure of MTX and MRT by inhibiting multiple anion transporters including OAT 1, OAT 3, and MRP 4 via the major metabolite indoxyl sulfate (IS) [3].

## Solubility Information

Solubility	H <sub>2</sub> O: 8 mg/mL (27.09 mM),Sonication is recommended. DMSO: 88 mg/mL (298.01 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 3.3 mg/mL (11.18 mM),Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

### Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.3865 mL	16.9325 mL	33.865 mL
5 mM	0.6773 mL	3.3865 mL	6.773 mL
10 mM	0.3387 mL	1.6933 mL	3.3865 mL
50 mM	0.0677 mL	0.3387 mL	0.6773 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

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- Wu CC, Hung SC, Kuo KL, Tarng DC. Impact of Indoxyl Sulfate on Progenitor Cell-Related Neovascularization of Peripheral Arterial Disease and Post-Angioplasty Thrombosis of Dialysis Vascular Access. *Toxins (Basel)*. 2017 Jan 7;9(1). pii: E25.
- Gao H, Liu S. Role of uremic toxin indoxyl sulfate in the progression of cardiovascular disease. *Life Sci*. 2017 Sep 15;185:23-29. doi: 10.1016/j.lfs.2017.07.027. Epub 2017 Jul 25. Review. PubMed PMID: 28754616.
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